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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,400	03/19/2001	Lester F. Ludwig	LUDW-001/02-03US	7356

7590 07/31/2002  
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EXAMINER

WITKOWSKI, STANLEY J

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/812400

Applicant(s)

Ludwig

Examiner

Witkowski

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5-7-02 & 6-3-02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 7-15 & 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-15 & 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4, 7-14 and 20 are rejected under the first paragraph of 35 U.S.C. 112 because the enabling disclosure is not commensurate in scope with the claims. In particular, independent claim 1 sets forth an alternative arrangement limited to either "a low frequency oscillator" or "a transient generator" with a single function "to control events and parameters." Independent claim 20 sets forth a Markush Group limited to a single function of changing. Claim 1 is analogous to a single means plus function claim and claim 20 is analogous to a single method step claim. The problem with a single means plus function claim and a single method step claim is that they cover every conceivable means or step for achieving a desired result while the disclosure discloses at most only those means and steps known to the inventor and hence, the claims 1 and 20 are of undue breadth. See *In re Hyatt*, 218 USPQ 195 regarding a single means plus function claim. The single step claim 20 is analogous to a single means plus function claim because 35 U.S.C. 112 fails to distinguish between a "means or step." Claim 1 limited to a single element is analogous to a single means plus function claim because 35 U.S.C. 112 allows an element in a claim to be expressed as a means for performing a specified function. Depending claims 2-4 and 7-14 fall with claim 1.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 2 and 7-12 are rejected under 35 U.S.C. 102(b) as being fully met by Colin.

This patent discloses a transient generator (Column 2, lines 4-7). An incoming control signal is provided (see Ic in Fig. 1). Claims 1 and 2 are met. The envelope limitations (Claims 7 and 10), the ramp limitations (claims 8 and 11) and the slew limitations (claims 9 and 12) are met.

5. Claims 1, 2 and 7-12 are rejected under 35 U.S.C. 102(b) as being fully met by Clark, Jr. et al.

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This patent discloses a transient generator (Fig. 28) wherein an incoming control signal is provided. Claims 1 and 2 are met. The envelope limitations (claims 7 and 10), the ramp limitations (claims 8 and 11) and the slew limitations (claims 9 and 12) are met.

6. Claims 1, 2 and 7-12 are rejected under 35 U.S.C. 102(b) as being fully met by Deutsch.

This patent discloses a transient generator (e.g., see column 3). Incoming control signals are provided to control attack and release. Claims 1 and 2 are met. The envelope limitations (claims 7 and 10), the ramp limitations (claims 8 and 11) and the slew limitations (claims 9 and 12) are met.

7. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 102(b) or (e) as being fully met by either of Hewitt et alii or Norris et alii, respectively.

Each patent discloses a low frequency generator with an incoming control signal provided thereto. Claims 1 and 2 are met. Regarding claims 3 and 4, MIDI is provided. Regarding claims 7 and 10, the envelope limitations are met. Regarding claims 8 and 11, the ramp limitations are met. Regarding claims 9 and 12, the slew limitations are met.

8. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being fully met by Martel.

This patent discloses a low frequency oscillator 1 controlled by an external incoming control signal from digital control signal source 15. Claims 1 and 2 are met. Regarding claims 3 and 4, MIDI is provided.

9. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 102(b) as being fully met by Kellogg et al.

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This patent discloses a low frequency oscillator 30 controlled by and incoming control signal. Claims 1 and 2 are met. Regarding claims 3 and 4, MIDI is provided. Regarding claims 7 and 10, the envelope limitations are met. Regarding claims 8 and 11, the ramp limitations are met. Regarding claims 9 and 12, the slew limitations are met.

10. Claim 20 is rejected under 35 U.S.C. 102(b) as being fully met by either of Gruenbaum or Fujita et al.

Each patent discloses the conversion of an incoming MIDI control signal to an altered outgoing MIDI control signal.

11. Claim 20 is rejected under 35 U.S.C. 102(a) as being fully met by either of Kushimiya or Hewlett.

Each patent discloses the conversion of an incoming MIDI control signal to an altered outgoing MIDI control signal.

12. Claim 20 is rejected under 35 U.S.C. 102(e) as being fully met by Su et al.

This patent discloses the conversion of an incoming MIDI control signal to an altered outgoing MIDI control signal.

13. Claims 15, 18 and 19 are rejected under 35 U.S.C. 102(b) as being fully met by either of Farrett et alii or Greene et al.

Each patent discloses the processing of plural incoming MIDI control signals and the providing of an outgoing MIDI control signal based on a combination of the input signals. Claim 15

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is met. Regarding claim 18, the input signals are added. Regarding claim 19, the output is digital.

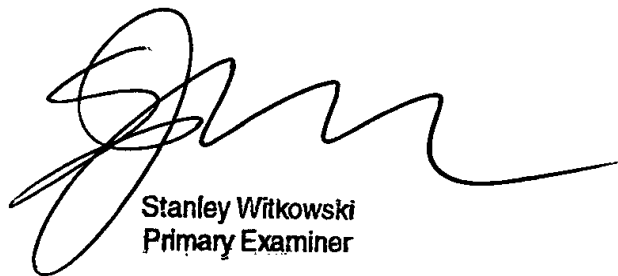
14. Claims 15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being fully met by Fay et al.

This patent discloses the processing of plural incoming MIDI control signals and the providing of an outgoing MIDI control signal based on a combination of the input signals. Claim 15 is met. Regarding claim 18, the input signals are added. Regarding claim 19, the output is digital.

15. Any inquiry concerning this communication should be directed to Stanley J. Witkowski at telephone number (703) 308-3101.

S J WITKOWSKI/pj

07/25/02



Stanley Witkowski  
Primary Examiner